VEHICLE DATA RECORDER

Compact DEUTSCH circuit board enclosure that accept snap-in headers. Radial flange seal provides environmental sealing to the enclosure. Specially designed for harsh environmental challenges and common industrial markets that require advanced performance.

Durability, physical shock resistance, fluid resistsance, insulation resistance, moisture resistance, etc are some of the key features.

Package	
Part Number	**AVDR-J1A4-001**
Length	8.0" (204 mm)
Height	6.3" (160 mm)
Depth	2.2" (55 mm)
Frame Material	Thermoplastic
Environmental	
Operating / Storage Temp	-40°C to 85°C / -50°C to 85°C
Normal Operating Condition	24°C
Electrical	
Operating Voltage	7V - 36V
Communication	
Protocols	CAN / J1939
Baud Rate	Flexible from 5kBit/sec to 1MBit/sec

Part Number	**AVDR-J1A4-001**	VEHICLE DATA RECORDER

621 Technologies Inc.
335 Tank St. Petrolia ON
1-519-333-3361

Revision 1.1
MAY 30 2022
Subject to change without notice

Data Logger:	AVDR-J1A4-001-x				AVDR-J1A4-002-x	
Data Logger H/W modification	A	B	C	D	C	D
CPU	ARM11 800 Mhz 32-bit RISC ARM	ARM Cortex-A7 900 Mhz 32-bit quad-core	ARM Cortex-A53 1.4 GHz 64-bit quad core	ARM Cortex-A72 1.5 GHz 64-bit quad core	ARM Cortex-A53 1.4 GHz 64-bit quad core	ARM Cortex-A72 1.5 GHz 64-bit quad core
RAM	512 MB	1 GB	1 GB	2 GB	1 GB	2 GB
Storage	8 Gb	8 Gb	8 Gb	8 Gb	8 Gb	8 Gb
# of days of PPMx Data	12000 Hours					
Physical Ports/Connections	- CAN J1939 – Connection to the Vehicle data stream / collected data downloading - Ethernet 10/100/1000 - for device settings interface access /collected data downloading. - USB (2.0x2, 3.0x2) - for technical support no regular access					
Wireless Connections	N/A				b/g/n single band 2.4 Ghz	b/g/n/ac dual band 2.4/5 GHz
Encryption	N/A				FIPS 140-2	
Power Requirement	12 Volt - 250 mA (3 W) average when idle, 520 mA (6.25 W)maximum under stress					
Other Sensors	N/A					
Software						
Data Logger:	VDR Firmvare 1.0.0.005				VDR Firmvare 1.1.0.001	
Operating System	Based on Debian GNU/Linux v.10					
Software to send data wired	VDR GUI 1.0.0.006				VDR GUI 1.1.0.001	
Software to send data wireless	N/A					
Software to download data thru CAN BUS	VDR Data Downloader v.2.0.1.1					
How to update software using the data logger.	Update required connection to VDR thru Ethernet and access to embedded Interface. New firmware can be downloaded from device website and uploaded on the device using embedded Interface.					

PERFORMANCE SPECIFICATIONS

TEMPERATURE
Operating at temperatures from -55° C to +125° C continuous at rated current.

DURABILITY
No electrical or mechanical defects after 100 cycles of engagement and disengagement.

VIBRATION
No unlocking or unmating and exhibits no mechanical or physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond.

PHYSICAL SHOCK
No unlocking, unmating, or other unsatisfactory result during or after 50 G's in each of three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond. MIL-STD 202, Method 213, Condition "C".

FLUID RESISTANCE
Connectors show no damage when exposed to most fluids used in industrial applications.

INSULATION RESISTANCE
1000 megohms minimum at 25° C.

MOISTURE RESISTANCE
Properly wired and mated connections will withstand immersion under three feet of water without loss of electronic qualities or leakage.

DIELECTRIC WITHSTANDING VOLTAGE
Current leakage less than 2 milliamps at 1500 VAC.

THERMAL CYCLE
No cracking, chipping or leaking after 20 test cycles from -55° C to +125° C.

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